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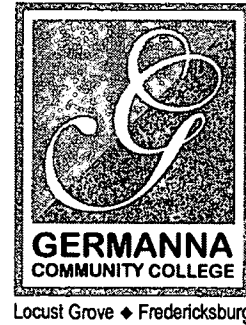
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AUTHOR Curtis, John W.  
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## ABSTRACT

This document briefly describes the student outcomes assessment program at Germanna Community College (GCC). Section 1 of this report presents an executive summary. Section 2 briefly assesses specific goals/objectives associated with nursing and business management technology majors together with evaluation methods, findings, and actions being taken to accomplish respective goals. While no actual persistence results are included in this report, section 3 summarizes the types of student persistence data available in other GCC publications, including: (1) persistence for students entering in fall semesters 1990-98 by race, sex, residence, high school status, initial enrollment status, and initial curriculum; and (2) retention trends for fall-to-spring (semester retention) and fall-to-fall (annual retention). Appendix A describes the academic program review process at Germanna and offers a schedule for program reviews over the next three years. Appendix B includes results of a follow-up survey of 1995-96 graduates, including assessment of educational satisfaction, current employment levels, and current student status. (PGS)

# Germanna Community College



## Student Outcomes Assessment 1998-99

### A Progress Report to the Virginia Community College System

John W. Curtis

Director of Institutional Research and Planning

September 15, 1999

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## **Section I.**

### **Executive Summary**

*Student Outcomes Assessment 1998-99* presents a brief summary of new findings and actions in two areas of Germanna Community College's overall student outcomes assessment program, according to the VCCS reporting guidelines for 1999. Section II summarizes assessment activities from the two occupational programs which provided specific reports during the last two academic years. Section III reports on a "Special Topic" under discussion at Germanna, an analysis of retention and completion rates by academic program. This summary report does not include data tables or supporting documentation, which are available from the Office of Research and Planning.

Two appendices to the report provide (A) a description and schedule for the academic program review process at Germanna; and (B) results from the follow-up survey of 1995-96 graduates on the items required for SCHEV reporting.

## Section II.

### Assessment in the Majors: Occupational Programs

#### A. Nursing

The Associate in Applied Science degree program prepares students to be certified as Registered Nurses. Students in the program meet additional admission requirements, and are assessed at various timepoints throughout the program. Assessment data has been collected annually. This section summarizes assessment results from 1997-99, excerpted from the 1998-99 program review for Nursing (March 1999) and the reports "Nursing Student Outcomes Assessment, Fall 1998" and "Student Learning Outcomes Assessment: Writing in the Nursing program, 1997-98" (Office of Research and Planning, November 1998).

Goal/Objective Being Assessed	Evaluation Method(s)	Findings	Actions Taken Or To Be Taken
Critical Thinking	Clinical Decision-making in Nursing Scale (Jenkins, adapted by Ingalls)  NLN Achievement Tests	Germann Nursing students produced an average score of 112.9, comparable to the reference norm of 116.0.  Nursing faculty established an objective to raise student scores to 120.0.  Overall scores on Basic Nursing I-II tests were above the national average (73 <sup>rd</sup> percentile).  Scores on physiological component were at 61 <sup>st</sup> percentile.  Scores on psychosocial component were at the 58 <sup>th</sup> percentile and have been decreasing since 1995-96.	Faculty will continue to implement critical thinking teaching/learning strategies in classroom, laboratory, and clinical settings.  Nursing and social science faculty implemented interventions to facilitate integration of psychosocial concepts with nursing knowledge and practice.  The target for performance on Basic Nursing I-II is the 60 <sup>th</sup> percentile.

Goal/Objective Being Assessed	Evaluation Method(s)	Findings	Actions Taken Or To Be Taken
Critical Thinking (Continued)	Preceptorship Experience  Arnett NCLEX-RN simulation	Identified RN preceptors evaluate student performance during the 90-hour experience; students also evaluate the experience. Both students and preceptors evaluated the experience as "good" (Mean = 4.4 on a 5-point Likert-type scale).  Arnett simulation used for the first time in 1998. No direct comparison between the Arnett NCLEX-RN and the previously administered Mosby RN Assess test.  Students average percentile rank on the Arnett simulation was 64.7  Average percentile rank on the Mosby RN Assess test was 65.0 between 1994 and 1997.	The target for preceptor and student evaluations is "good" (4.00).  The target will be the 65 <sup>th</sup> percentile.  Compare outcomes of actual NCLEX-RN with simulation.  Investigate use of Arnett Critical Thinking Outcome Evaluation (CTOE).
Written Communication	Writing samples from NUR 254 (capstone course).	Interdisciplinary teams rated samples on fifteen criteria with ratings assigned to each criterion on a scale from 0 = "not evident" to 2 = "clearly evident".  In comparison with ratings assigned in 1996, students' ability to articulate their professional knowledge and goals in writing appears to have improved on most criteria. This can likely be attributed to an increased emphasis on writing in the program. (Contrary to the 1996 result, the Nursing Faculty in 1998 gave generally lower scores than their non-nursing faculty counterparts.)	Target will be a mean score on all criteria exceeding 1.0, a rating of "minimally evident" on the 3-point scale.

Goal/Objective Being Assessed	Evaluation Method(s)	Findings	Actions Taken Or To Be Taken
Therapeutic Nursing Intervention	Assessment of nursing care plans (criterion-referenced)	<p>RNs in education and practice settings rated the sample care plans using a 3-point scale for each criterion. Student care plans completed at the end of both first- and second-year nursing courses were rated.</p> <p>The highest average ratings on the paired care plans were in the areas of "subjective data", "nursing diagnosis", and "implementation".</p> <p>The one criterion which was rated relatively low in comparison with the others was the "plan" aspect, the aspect also rated lowest in the previous assessment (1996).</p> <p>Reviewers also determined that approximately 86% of the care plans did <i>not</i> address cultural issues.</p> <p>Assessment of individual student progress revealed a progression of skills as documented in the care plans. The largest increases were in the identification of "objective data" and the "plan" aspects. An increase was evident in all of the care plan criteria except for the "implementation" aspect, which remained constant.</p>	<p>Targets for further evaluation:</p> <ul style="list-style-type: none"> <li>• All criteria will receive average ratings above the "minimally evident" level (1.0)</li> <li>• At least 65 % of the care plans will address cultural issues.</li> </ul> <p>Nursing faculty have collaborated with social science faculty in a workshop on cultural awareness.</p> <p>Faculty have written teaching objectives for relating the psychosocial, economic, and spiritual environment to the health-illness continuum.</p>
NCLEX-RN Pass Rate	Percentage of graduates who pass the NCLEX-RN exam as first-time candidates	<p>The 1998 NCLEX-RN pass rate for the Nursing Program was 91%.</p> <p>The target for comparison is the passing rate of first-time candidates for the state of Virginia, currently 88%.</p>	Faculty will continue to monitor pass rates.

## B. Business Management Technology

Germanna offers the Associate of Applied Science degree in Business Management Technology with three majors: Management, Accounting, and Service and Support Technology. All three majors share a common core of courses in Business. The assessment reported here concerns BUS 121-122 "Business Math I-II", which is part of that core. The Business Math courses also are part of the AA&S Business Administration curriculum, and Career Studies Certificates in Supervision and Small Business Management. These findings are excerpted from the report "Completion and Success Rates in Business Math, 1996-99: Correlation with placement testing, prerequisites, and Work Keys competency testing" (Office of Research and Planning, September 1999).

Goal/Objective Being Assessed	Evaluation Method(s)	Findings	Actions Taken Or To Be Taken
Math preparation for success in Business Math	Analysis of completion and success rates in BUS 121	<p>Students whose placement test scores indicated adequate preparation were less likely to fail to complete BUS 121 (6.5% vs. 14.0%) and substantially more likely to be successful (79.0% vs. 56.7%).</p> <p>However, students with <i>no</i> recorded placement test scores were actually <i>less</i> likely to fail to complete BUS 121 (5.4%) and <i>more</i> likely to succeed (85.2%).</p> <p>Very few BUS 121 students who attempted a math prerequisite course were unsuccessful; however, those who were not successful in the prerequisite also were not successful in BUS 121.</p> <p>The majority of students who successfully completed a math prerequisite were successful in BUS 121 (75.1%); however, nearly the same proportion of students who did not attempt <i>any</i> math prerequisite were successful (77.0%).</p>	<p>Students who are placed in Business Math on the basis of information other than placement scores or Germanna course prerequisites should be identified for further analysis.</p> <p>Students who are recommended for a math prerequisite course should be strongly encouraged to take that course.</p> <p>Students not successful in the math prerequisite should be strongly discouraged from taking BUS 121 without further</p>



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preparation.

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Goal/Objective Being Assessed	Evaluation Method(s)	Findings	Actions Taken Or To Be Taken
Math preparation for success in Business Math (Continued)	Analysis of completion and success rates in BUS 121 (Continued)	An analysis of the combination of placement testing and prerequisite courses produced the following success rates for BUS 121 (GPA in parentheses): No placement score, no prerequisite – 84.8% (2.88) Placement = "Prepared", no prerequisite – 78.3% (2.67) Successful completion of prerequisite – 75.1% (2.44) Placement = "Not Prepared", no prerequisite – 55.1% (1.71) Unsuccessful completion of prerequisite – 23.1% (0.85)	
Assessment of math skills with reference to workplace requirements	Work Keys competency testing: Applied Mathematics	Provisional competency levels for Applied Mathematics (AM) test were established for initial analysis: Level 3 as entry skill for BUS 121; Level 4 as exit skill for BUS 121 (and entry level for BUS 122); Level 5 as exit skill for BUS 122.  Students tested Spring 1999 at entry in BUS 122: 94% scored at Level 4 or higher. (Nearly ALL students had completed BUS 121 the previous semester.)  AM test scores were not strongly associated with the likelihood of completing BUS 121. Students who successfully completed BUS 121 showed a wide variation in AM scores. However, when correlated with actual grades from BUS 121, AM scores did produce a statistically significant correlation ( $r = .43$ ).  AM scores proved more useful as a predictor of both successful completion and grades in BUS 122: Of students who scored at least 4 on the AM test; 93% completed the course with at least a "C"; of students who scored 3 on the AM test, 0% completed the course successfully.  However, the more accurate predictor of grade outcome in	Business faculty will develop a plan to assess students using Work Keys Applied Mathematics at four potential timepoints: entry to and exit from BUS 121; entry to and exit from BUS 122.  The testing design will be structured, based on further information from ACT, so as to avoid test/retest bias in the results.  Expanded results will be used to verify or revise the provisional competency levels for the two courses.

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BUS 122 was the grade received in BUS 121.

## Section III.

### Special Topic: Retention

The following summary is drawn from the report "Retention and Completion Patterns, 1990-99" (Office of Research and Planning, September 1999). The report provides data on the following aspects of student persistence:

#### **Persistence for students entering in Fall semesters 1990-98**

- Tracks students who initially enrolled at the College during Fall semester. (Nursing students enter that program during Summer Session, and are tracked in a separate report.)
- Persistence is measured as one of three outcomes: completion of a degree or certificate program; currently enrolled; or not currently enrolled ("stopout").
- Outcomes are categorized by student's race, sex, residence, high school status, initial enrollment status, and initial curriculum.

#### **Retention trends, Fall 1990-98**

- Calculates two retention measures for students enrolled in each Fall semester: Fall-to-Spring (semester retention) and Fall-to-Fall (annual retention).
- Outcomes are categorized by student's race, sex, residence, high school status, initial enrollment status, and initial curriculum.

#### **Action Steps**

- Faculty and instructional administrators will examine persistence and retention trends for each program, and recommend changes in scheduling and support services to produce an increase in both rates.
- Student Development Services personnel will examine persistence and retention trends with reference to demographic variables, and recommend changes to support services and recruiting to produce an increase in both rates.

## Appendix A.

### Program Review Process and Schedule

**Academic Program Reviews include the following elements:**

- Enrollment Trends
- Student Learning Outcomes (Assessment)
- Curriculum
- Opportunities for faculty professional development

**Academic Program Reviews are conducted on a two-year cycle, as follows:**

<b>Term</b>	<b>Phase</b>	<b>Activities</b>
<b>Fall 1</b>	Issues	Determine issues for outcomes assessment, based on prior findings and activities
<b>Spring 1 (Summer)</b>	Assessment	Carry out assessment activities in courses Gather data Complete panel reviews of student projects
<b>Fall 2</b>	Analysis	Analyze and discuss assessment findings  Recommend changes in curriculum, scheduling, and instructional methods, and corresponding faculty professional development
<b>Spring 2</b>	Report	Implement scheduling and curriculum changes  Complete academic program review report, including goals and objectives for upcoming year  Relate program goals and objectives to individual faculty goals and objectives

Completion of a program review report is followed by a one year break from formal review requirements.

The current schedule for program reviews during the next three academic years is as follows:

<b>Program</b>	<b>Fall 1999</b>	<b>Spring/Summer 2000</b>	<b>Fall 2000</b>	<b>Spring/Summer 2001</b>	<b>Fall 2001</b>	<b>Spring/Summer 2002</b>
Accounting (Cert) ( <i>New Fall 1999</i> )	None	None	Issues	Assessment	Analysis	Report
Accounting (CSC) ( <i>New Fall 1999</i> )	None	None	Issues	Assessment	Analysis	Report
Business Administration (AA&S)	Issues	Assessment	Analysis	Report	None	None
Business Management Technology (AAS)	None	None	Issues	Assessment	Analysis	Report
Management Accounting Service and Support						
Call Center (CSC)	Analysis	Report	None	None	Issues	Assessment
Clerical Studies (Cert)	Issues	Assessment	Analysis	Report	None	None
Counseling (CSC)	None	None	Issues	Assessment	Analysis	Report
Early Childhood (CSC)	None	None	Issues	Assessment	Analysis	Report
Education (AA&S)	Issues	Assessment	Analysis	Report	None	None
Electronics (AAS)	Issues	Assessment	Analysis	Report	None	None
General Studies (AA&S)	Issues	Assessment	Analysis	Report	None	None
Information Processing (CSC)	Issues	Assessment	Analysis	Report	None	None
Information Systems (AAS)	Issues	Assessment	Analysis	Report	None	None
Legal Assistant (CSC)	Issues	Assessment	Analysis	Report	None	None
Liberal Arts (AA&S)	None	None	Issues	Assessment	Analysis	Report
Microcomputer Applications (CSC)	Issues	Assessment	Analysis	Report	None	None

<b>Program</b>	<b>Fall 1999</b>	<b>Spring/Summer 2000</b>	<b>Fall 2000</b>	<b>Spring/Summer 2001</b>	<b>Fall 2001</b>	<b>Spring/Summer 2002</b>
Networking (CSC)	None	None	Issues	Assessment	Analysis	Report
Nursing (AAS)	None	None	Issues	Assessment	Analysis	Report
Police Science (AAS)	Issues	Assessment	Analysis	Report	None	None
Practical Nursing (Cert) (New Fall 1999)	None	None	Issues	Assessment	Analysis	Report
Science (AA&S)	None	None	Issues	Assessment	Analysis	Report
Semiconductor Mfg. (CSC)	None	None	Issues	Assessment	Analysis	Report
Small Business Mgmt. (CSC)	Issues	Assessment	Analysis	Report	None	None
Supervision (CSC)	Issues	Assessment	Analysis	Report	None	None

## Appendix B.

### Follow-up Survey of 1995-96 Graduates: SCHEV required items

**Total 1995-96 Graduates: 251**

**Responses to one-year follow-up survey: 112**

**Response rate: 44.6%**

1. To what extent were you satisfied with each of these aspects of your community college degree program?

	Very Much		Somewhat		Very Little		Not at All		Not Applicable		Total responses	
	n	%	n	%	n	%	n	%	n	%	n	%
Education	53	49.1	50	45.3	5	4.6	0	0.0	0	0.0	108	43.0
Advising	<i>Data not available</i>											
Course availability	<i>Data not available</i>											

1. Are you currently employed?

	n	%
Yes, full-time	65	58.6
Yes, part-time	33	29.7
No, seeking employment	5	4.5
No, not seeking employment	8	7.2
<i>Total responses</i>	111	(44.2)

1. To what extent is your community college degree program related to your current occupation?

*Data not available*

2. To what extent does your community college degree program help you perform in the workplace?

*Data not available*



## 3. Are you currently pursuing a bachelor's degree?

	n	%
Yes, full-time	30	29.7
Yes, part-time	16	15.8
Yes, completed	0	0.0
Yes, stopped	6	5.9
No	49	48.5

*Total responses* 101 (40.2)

## 1. To what extent is this bachelor's degree related to your community college degree program?

*Data not available*

## 2. To what extent did your community college degree program prepare you academically for the bachelor's program?

Very Much		Somewhat		Very Little		Not at All		Not Applicable		Total responses	
n	%	n	%	n	%	n	%	n	%	n	%
38	67.9	11	19.6	0	0.0	7	12.5	0	0.0	56	22.3

## 1. To what extent did your community college degree program prepare you for responsible citizenship (e.g. better informed about your community and the political process)?

*Data not available*

## 2. How much money did you borrow to pay for tuition, books, and other educational expenses before you graduated from this community college?

*Data not available*



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